

REMARKS

In the Office Action dated May 10, 2004, claims 2-4, 6-18, 20-22, 26, 28, and 30-32 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 6,671,266 (Moon) in view of U.S. Patent No. 5,727,033 (Weaver); claims 19 and 24 were rejected under § 103 over Moon in view of Weaver and “admitted prior art”; and claim 23 was rejected under § 103 over Moon in view of Weaver and U.S. Patent No. 6,208,699 (Chen).

With respect to the restriction requirement, Applicant confirms the election of the invention of Group I (claims 2-32). This election is made without traverse. Claims 33-36 have been cancelled without prejudice to submitting such claims in a divisional application.

With respect to claim 4, the hypothetical combination of Moon and Weaver does not disclose or suggest the following elements: (1) detecting an error in control signaling transmitted over a *reverse* link between the base station and the mobile unit when traffic channels are not being communicated (*in the reverse link*), and (2) adjusting a target ratio of energy to bit of noise spectral density based on the detected error in the control signaling (transmitted over the reverse link). The only reference made by Moon to DTX is with respect to the “Fourth Exemplary Method of the Third Embodiment” discussed in the passage at column 8, line 64 through column 9, at line 23. In this embodiment, Moon states that “it is assumed that the quasi-orthogonal channel for the *forward* link operates in a discontinuous transmission (DTX) mode.” Moon, 9:1-3. As discussed elsewhere in Moon, the quasi-orthogonal channel for the forward link (the channel spread with the quasi-orthogonal code) is the forward dedicated control channel. Moon, 4:64-68. The channel that is spread with an orthogonal code is the forward fundamental channel. Moon, 4:64-65. Thus, in the discussion of detecting for errors of the quasi-orthogonal channel signal in the passage of column 9, Moon is describing the detection for errors in the forward link (not the reverse link). As depicted in FIG. 2 of Moon (also cited by the Office Action), the power control commands (PCC) are sent from the mobile station to the base station (over the reverse link) in response to detection SIRs of the orthogonal code channel 23a and the quasi-orthogonal code channel 23b (both sent over the forward link). Therefore, it is clear that Moon does not disclose or suggest detecting an error in control signaling transmitted over a

reverse link or adjusting a power control element based on detected error in the control signaling of the reverse link.

Weaver expressly teaches an inner control loop that detects the Eb/No of propagated *voice data* and adjusts a power output level of a reverse link transmitter 102 to increase or decrease the Eb/No of propagated voice data to match a target Eb/No. Thus, the Eb/No adjustment taught by Weaver is based on *voice data*, not *control signaling*. Weaver, 3:46-48. In other words, Weaver also does not disclose or suggest detecting an error in *control signaling* transmitted over a reverse link or adjusting the target ratio of energy per bit to noise spectral density based on the detected error in the *control signaling*.

It is therefore clear that the hypothetical combination of Moon and Weaver fails to teach or suggest all elements of claim 4. Therefore, a *prima facie* case of obviousness cannot be made with respect to claim 4 over the asserted combination of Moon and Weaver for at least this reason.

There was also no motivation or suggestion to combine the teachings of Moon and Weaver. Whereas Moon discloses power control for a base station that transmits an orthogonal code channel and a quasi-orthogonal code channel over a CDMA forward link, Weaver relates to power control based on received voice data. There appears to be absolutely no *desirability* to incorporate the teachings of Weaver into the system of Moon.

It is well established law that “[t]he mere fact that the prior art could be so modified would not have made the modification **obvious** unless the prior art suggested the **desirability** of the modification.” *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125 (Fed. Cir. 1984) (emphasis added). As the Federal Circuit has stated, “virtually all [inventions] are combinations of old elements.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998). “Most, if not all, inventions are combinations and mostly of old elements.” *Id.* “Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for

piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be ‘an illogical and inappropriate process by which to determine patentability.’” *Id.*

There is absolutely no need or desirability to incorporate power control based on voice data (as described in Weaver) to power control for a forward link that transmit a quasi-orthogonal channel and an orthogonal channel (as described in Moon). Therefore, a *prima facie* case of obviousness cannot be made with respect to claim 4 over Moon and Weaver for this further additional reason.

It is therefore respectfully submitted that claim 4, and its dependent claims, are not obvious over Moon and Weaver.

Independent claim 20 is also allowable over the asserted combination of Moon and Weaver. Note that claim 20 recites a controller to detect whether a mobile unit is in discontinuous transmission mode, and to detect for error in the received control signaling from the mobile unit and to adjust a power control condition based on detected error in the received control signaling in response to detecting that the mobile unit is in the discontinuous transmission mode. The Office Action cited to columns 9, lines 1-23, and FIG. 2, as disclosing this feature of claim 20. Applicant respectfully disagrees. The cited passage refers to DTX mode of the forward link, and to receipt of a quasi-orthogonal channel for the forward link in DTX mode. Furthermore, the cited column 9 passage refers to detecting errors of the quasi-orthogonal channel (in the forward link) by the mobile station. In contrast, the controller of claim 20 detects whether the mobile unit is in DTX mode, something that is not disclosed or suggested by Moon. Further, because Moon describes detecting error in the quasi-orthogonal channel for the forward link, Moon also does not disclose that a controller could detect for error in the received control signaling *from the mobile unit* and to adjust a power control condition based on detected error in the received control signaling (from the mobile unit) in response to detecting that the mobile unit is in the discontinuous transmission mode.

Weaver also similarly does not teach or suggest the detection of whether the mobile unit is in discontinuous transmission mode or detecting for error in the received control signaling

from the mobile unit and adjusting a power control condition based on detected error in the received control signaling. Therefore, the hypothetical combination of Moon and Weaver does not disclose or suggest *all* elements of claim 20. A *prima facie* case of obviousness has thus not been established with respect to claim 20 for at least this reason.

There also is no motivation or suggestion to combine the teachings of Moon and Weaver to achieve the invention of claim 20. As discussed above, there is clearly no desirability or need to incorporate the voice data-based power control of Weaver into the system of Moon. Therefore, no motivation or suggestion existed to combine Moon and Weaver in the manner proposed by the Office Action. The *prima facie* case of obviousness of claim 20 is defective for this additional reason.

Independent claim 30 is also allowable over the asserted combination of Moon and Weaver for the reason that neither Moon nor Weaver discloses or suggests determining whether the *mobile unit* is in discontinuous transmission mode and adjusting a power control element based on the detected one or more errors in control signaling if the *mobile unit is in discontinuous transmission mode*. The hypothetical combination of Moon and Weaver thus fails to teach or suggest all elements of claim 30. Also, there is no motivation or suggestion to combine the teachings of Moon and Weaver in the manner proposed by the Office Action, as discussed above. Therefore, a *prima facie* case of obviousness has not been established with respect to claim 30.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. In view of the defective application of Moon and Weaver to base claims 1 and 20, it is respectfully submitted that the obviousness rejection of claims 19 and 24 over Moon, Weaver, and “admitted prior art” is also defective. In view of the defective application of Moon and Weaver to base claim 20, it is respectfully submitted that the obviousness rejection of claim 23 over Moon, Weaver, and Chen is also defective.

Allowance of all claims is respectfully requested.

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Amdt. dated August 10, 2004  
Reply to Office Action of May 10, 2004

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0031US).

Respectfully submitted,

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Date



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